UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/556,655	11/12/2005	Bjorn Jonsson	P16448-US1	6547

27045 7590 01/15/2009

ERICSSON INC.
6300 LEGACY DRIVE
M/S EVR 1-C-11
PLANO, TX 75024

EXAMINER	
DAGER, JONATHAN M	
ART UNIT	**PAPER NUMBER**
3663	

MAIL DATE	DELIVERY MODE
01/15/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/556,655	JONSSON ET AL.	
	Examiner	Art Unit	
	JONATHAN M. DAGER	3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 October 2008*.

2a)☒ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see pages 8-9, filed 08 October 2008, have been fully considered but they are not persuasive.

The Applicant has contended that independent claims 1 and 10, as previously presented, are not anticipated by Chern (US 2003/0060211) and that the prior rejection of the claims should therefore be withdrawn.

The Examiner respectfully disagrees; regarding claims 1 and 10, Chern discloses a wireless location-based information-retrieval system which includes a wireless communication device. The wireless device has a transceiver for sending and receiving communications across a wireless communication network, a position-determination device for determining the location of the wireless device, and an Internet browser. A remote server communicates with the wireless device. The server receives the location data from the wireless device over the network and maintains a web page listing information service options. The information service options are accessible to and selectable by the wireless device via the browser. The server retrieves information from a database based on the location data provided by the wireless device and on the selected service option. The retrieved information is sent to the wireless device over the network (abstract).

Chern discloses a device, wherein a user in a vehicle can obtain driving directions to a destination address is provided to a handset. The user requests driving directions to the destination via keypad entry and/or voice command, and the request is communicated to server 136 over wireless network 140. At the time of the request, the handset location determined by

position determination system 134 is also provided to server 136 to provide a starting point for the directions. Using the handset location and the destination address, server 136 calculates a route and compiles driving directions. The driving directions are transmitted to handset 130 over network 140 and are displayed or audibly rendered to the user. In addition to textual driving directions, a map showing the route may be displayed on the handset display. Options such as the shortest possible route, interstate route, safest route, most scenic route, etc. may be provided. The user's choice of options will dictate the route calculation. The options may be stored, and prompts or scripts generated, locally (in the memory of handset 130). Alternatively, the options, prompts and scripts may be stored at server 136 and provided to the user via network 140 (para 0044).

Thus, Chern discloses a system for producing guiding information for a user in a vehicle, comprising means for generating a specification to retrieve specific data from information sources in a specific format for outputting to the user, As well as means for presentation of the compiled information through a plurality of media.

Further, the above provides for a first and second output medium for presentation.

Chern discloses that the processor 104 directs the overall operation of device 100. A computer program or set of instructions is typically coded or otherwise implemented on the processor to enable the processor to carry out the device operation. Memory 114 interfaces with processor 104 and may store program code and provide storage space for data useful in executing the program code and carrying out the device functions. Memory 114 may be implemented as ROM, RAM or any other convenient memory format. The features and functionality of the invention described below may be implemented using hardware, software, or

a combination thereof, and such software can run on a processor such as processor 104 and be stored in a memory such as memory 114.

Transceiver 112 includes a transmitter that transmits voice and data information via antenna 120 to a recipient communication device such as, for example, base station 112. Transceiver 112 also includes a receiver that receives voice and data information from another communication device (e.g., base station 112). The received voice and data information is provided to the user or used to facilitate device operation.

Chern discloses that the user interface features include speaker 106, display 108, keypad 110, and microphone 116. Microphone 116 accepts voice or other audio information from the user and converts this information into electrical signals that can be transmitted by transceiver 112. Likewise, speaker 106 converts electrical signals received by transceiver 112 into audio information that can be heard by a user of device 100. Display 108 displays information such as call information, keypad entry information, signal presence and strength information, battery life information, or any other information useful to the user. Display 108 preferably takes the form of a liquid crystal display (LCD), which have low power consumption characteristics, but could also be implemented as a light emitting diode (LED) display or any other appropriate visual indicator. Keypad 110 typically includes an alphanumeric keypad and may also include special function keys. In one embodiment, keypad 110 is backlit to permit viewing of the keys in low light or dark conditions. Device 100 may also include a flip panel (not shown) that can be closed to conceal some or all of the keypad (para 0033-0035, respectively).

Thus, Chern again discloses a means for compiling, means for generating, means for retrieving information related to an information object, means for processing, and presentation means.

Chern discloses that a hands-free unit 132 is optionally provided to allow the user of wireless device 130 to communicate in a hands-free mode. Hands-free unit 132 may include a microphone and speaker to provide wireless device 130 with speakerphone-like capabilities. Such capabilities are particularly desirable where wireless device 130 is utilized in an automobile or other mobile situation. In one implementation, hands-free unit 132 is configured according to conventional industry standards for a "hands-free kit" (para 0039).

Thus, Chern discloses a first means for providing information regarding an information object, and providing a specification message comprising an information object on a first medium. Conversely, this implicitly provides selection means in that if the hands free medium is not used, the handset output devices will be used, As well as means for outputting information associated with said information object on a preferred medium, wherein selection is based on availability of the medium.

Chern discloses that in one example application, driving directions to a destination address are provided to a handset user. The user requests driving directions to the destination via keypad entry and/or voice command, and the request is communicated to server 136 over wireless network 140. At the time of the request, the handset location determined by position determination system 134 is also provided to server 136 to provide a starting point for the directions. Using the handset location and the destination address, server 136 calculates a route and compiles driving directions. The driving directions are transmitted to handset 130 over

network 140 and are displayed or audibly rendered to the user. In addition to textual driving directions, a map showing the route may be displayed on the handset display. Options such as the shortest possible route, interstate route, safest route, most scenic route, etc. may be provided. The user's choice of options will dictate the route calculation. The options may be stored, and prompts or scripts generated, locally (in the memory of handset 130). Alternatively, the options, prompts and scripts may be stored at server 136 and provided to the user via network 140 (para 0044).

Thus, Chern discloses at least one example in which compiled information is retrieved after a route search on the handset via input devices (means for generating a specification), means for presentation of the data on the handset, as well as the processor providing means for processing the data received from the database and presenting on the display the compiled information, containing a specification of a message comprising an information object.

Alternatively, Chern provides that the user may also specify avoidance of certain areas or parts of town, such as those that have high crime rates, gang or drug activity, or other undesirable attributes. Crime statistics from law enforcement authorities or other sources can be compiled and stored in database 138. Based on these statistics, certain areas or neighborhoods may be identified as high crime rate areas or otherwise undesirable areas. The user may opt to not receive choices for establishments in, or driving directions through, those areas. This feature can be implemented automatically, as a default selection or through a user prompt. Alternatively, the system may provide an automatic warning sound or indication to alert the user of entry into a high-crime-rate area. This feature is particularly useful if the user is unfamiliar with a particular area in which he or she is travelling (para 0048).

Again, Chern is discloses that the user can prompt the system to provide an automatic warning based on location information. This warning can be an audible or visual cue, based on user preference. Further, it is noted that this alarm will be output on the preferred medium based on the priority of information.

Therefore, claims 1 and 10 remain rejected under 35 U.S.C. 102(e) as anticipated by Chern.

2. Applicant's arguments, see page 9, filed 08 October 2008, with respect to the rejection of claims 2, 4, 5, 7-9, 11, 13, 14, and 16-18 under 35 U.S.C. 102(e) have been fully considered but they are not persuasive.

The Applicant has contended that since claims 2, 4, 5, 7-9, 11, 13, 14, and 16-18 depend from the now allowable respective independent claims 1 and 10, the dependent claims are allowable.

The Examiner respectfully disagrees; independent claims 1 and 10 remain rejected, hence, claims 2, 4, 5, 7-9, 11, 13, 14, and 16-18 remain rejected under 35 U.S.C. 102(e) as anticipated by Chern, for those reasons cited above as well as the previous grounds discussed in the prior office action, which are incorporated herein.

3. Applicant's arguments, see page 9, filed 08 October 2008, with respect to the rejection of claims 19 and 20 under 35 U.S.C. 102(e) have been fully considered and are persuasive. Therefore, the rejection of claims 19 and 20 has been withdrawn.

However, upon further consideration, new grounds of rejection are warranted (see below).

4. Applicant's arguments, see page 9, filed 08 October 2008, with respect to the rejection of claim 21 under 35 U.S.C. 102(e) have been fully considered and are persuasive due to amendment. Therefore, the rejection claim 21 has been withdrawn.

However, upon further consideration, new grounds of rejection are warranted (see below).

5. Applicant's arguments, see pages 10-11, filed 08 October 2008, with respect to the rejection of claims 3 and 12 under 35 U.S.C. 103(a) have been fully considered but they are not persuasive.

The Applicant has contended that since claims 3 and 12 depend from the now allowable respective independent claims 1 and 10, the dependent claims are allowable.

The Examiner respectfully disagrees; independent claims 1 and 10 remain rejected, hence, claims 3 and 12 remain rejected under 35 U.S.C. 103(a) as obvious over the combination of Chern and DeLorme (US 6,321,158), for those reasons cited above as well as the previous grounds discussed in the prior office action, which are incorporated herein.

6. Applicant's arguments, see pages 11-12, filed 08 October 2008, with respect to the rejection of claims 6 and 15 under 35 U.S.C. 103(a) have been fully considered but they are not persuasive.

The Applicant has contended that since claims 6 and 15 depend from the now allowable respective independent claims 1 and 10, the dependent claims are allowable.

The Examiner respectfully disagrees; independent claims 1 and 10 remain rejected, hence, claims 6 and 15 remain rejected under 35 U.S.C. 103(a) as obvious over the combination of Chern and Buckham (US 6,662,016), for those reasons cited above as well as the previous grounds discussed in the prior office action, which are incorporated herein.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9 and 21 are newly rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 21 both contain the phrase "means for" in the claim language. This embodiment is supported throughout the specification, and the claim language is subsequently treated under 35 USC 112, sixth paragraph. However, the specification fails to set forth the exact structure, or equivalent thereof, that corresponds to the claimed function.

"If the specification is not clear as to the structure that the patentee intends to correspond to the claimed function, then the patentee has not paid the price for use of the convenience of

broad claiming afforded by 112, sixth paragraph but is rather attempting to claim in functional terms unbounded by any reference to structure in the specification. If one employs means-plus-function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section 112." See Biomedino, LLC v Waters Technologies Corporation (Fed Cir, 2006-1350, 6/18/2007).

For example, claim 1 recites a "means for compiling", and the language is mentioned in the abstract, and in the initially filed specification, see pages 11 lines 1-3, page 13 lines 13-16). However, the exact "compiling" structure, and/or reasonable equivalent thereof, cannot be ascertained from the specification.

Subsequently, dependent claims 2-9 are drawn to the invention of independent claim 1, and are rejected under similar grounds.

Claim Rejections - 35 USC § 103

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uhlmann (US 6,553,308), and further in view of Mathews (US 2003/0060973).

Regarding claim 19, Uhlmann discloses a method of navigation in a vehicle. More particularly, the invention is directed to a vehicle-based navigation system with smart map

filtering, portable unit home-base registration, and multiple navigation system preferential use (column 1 lines 13-18).

Uhlmann discloses, when referring to FIG. 1, should vehicle 12 be driving on a road during a snow/ice condition, then database 16, knowing the geographic location of vehicle 12 by wireless communication from vehicle 12 to database 16 of the vehicle's instantaneous location as determined by in-vehicle navigational system 13, and database 16 knowing the local weather conditions at that location (or, alternately, database 16 linking to a data source to provide this local weather information) and recognizing that local icing conditions exist, database 16 can communicate back via wireless communication (via an RF link or a microwave link or a radio link) control data to vehicle 12 to set a parameter of the vehicle, such as traction, suspension, tire pressure, or the like, to a condition that best suits driving at that location and experiencing that particular weather condition (column 5 lines15-30).

Thus, Uhlmann discloses retrieving a real-time weather condition.

The invention of Uhlmann further includes a dynamic traffic control function wherein the geographic position and heading of a plurality of vehicles is dynamically provided to a traffic control center, and based on the information provided by wireless communication by, preferably, many hundreds to thousands of vehicles to the traffic control center regarding traffic location and individual vehicle direction/travel intent, then traffic control elements such as traffic lights, speed limits, traffic signs, and the like, can be set dynamically in accordance with dynamic traffic conditions in a locality. Thus, for example, data from such as system 10 of FIG. 1 could be wirelessly communicated to a traffic control center, and vehicle 12, in turn, could receive data back from the traffic control center (via wireless communication) updating on local traffic

conditions and/or causing database 16 to display in vehicle 12 the least traffic-congested route to the destination desired by the driver/in the local area of the vehicle (column 5 lines 44-60).

Thus, Uhlmann discloses compiling real-time traffic information for use in vehicle navigation.

Uhlmann discloses that smart map filtering that includes a vehicle-based navigation system 13 and a communication link 14, preferably a wireless link such as via radio frequency (RF) or microwave telecommunication, between vehicle 12 and a map database 16. In the illustrated embodiment, map database 16 is located remote from vehicle 12. Vehicle 12 is a road transportation vehicle such as an automobile, bus, truck or van. Communication link 14, which is a two-way link, includes communication of map data from database 16 to vehicle 12, as illustrated at 14a, and communication of information such as speed information from vehicle 12 to database 16, as represented by 14b. Various information can be communicated from vehicle 12 to database 16 and from database 16 to vehicle 12. Such information can include identification of the driver or vehicle (for example, that the vehicle is part of a particular rental fleet or that the driver is a subscriber to the remote service provider of database 16), authorization for the driver or vehicle to access database 16, payment by the driver/vehicle to access or transact with database 16, information on the language/dialect understood by the driver and desired communication from database 16 to vehicle 12, credit information, and the like. Such information communicated from vehicle 12 to remote database 16 can include the geographic location of the vehicle, its velocity and heading while travelling on a road, its altitude above sea level, its inclination, and the type of vehicle and its equipment level so that the data sent from database 16 to vehicle 12 is appropriate for the level/model of equipment/display in the

vehicle. Such information communicated from vehicle 12 to remote database 16 can also include a request/preference by the driver for a particular level of map detail/area display/detail density and the like. Map data transferred from database 16 to vehicle 12, such as at 14a, preferably has a particular resolution determined, most preferably, by driver preference and/or by driver authorization and/or by driver experience and/or by driver payment and/or by equipment/display capability in the vehicle and/or by vehicle velocity and/or by vehicle location and/or by vehicle heading and/or by vehicle type or model. Map data resolution establishes the capability of distinguishing individual features of the map segment. In particular, higher resolution map data includes more details, such as individual city streets and landmarks; whereas, coarser resolution map data may include fewer details, such as only thoroughfares, interstate highways, and exit information. The skilled artisan would understand that there is a wide range of information that could be encompassed within the definition of map data resolution. Map data may include related data, such as restaurants, shopping centers, street names, and the like. The display of map data to the driver is thus adaptive to the particular driving condition at the moment of display, and the resolution of the data displayed is a dynamic function of vehicle and personal parameters. Thus, the resolution and/or detail of information displayed to and/or presented to (such as audibly) the driver located within the interior cabin of the vehicle can dynamically adapt in accordance with a vehicle parameter of the vehicle, such as vehicle speed or location or model or equipment type or heading/direction of travel or vehicle authorization, or in accordance with a personal parameter of a person such as of an occupant of the vehicle such as of the driver and/or of a passenger (such as driver/occupant identity, driver/occupant preference for a particular level of information resolution and/or detail such as might be manually input or such as might be

stored in a memory in the vehicle, driver authorization, driver credit, driver national identity, driver linguistic, and the like), and in accordance with a driving condition at a particular time and/or at a particular location (column 2 lines 14-67, column 3 lines 1-17).

Uhlmann also discloses that emergency vehicles such as police cars, ambulances, fire trucks, and the like, can communicate via wireless communication to a vehicle such as vehicle 12 causing an alert (such as an audible alert or a visual alert such as an icon or display) being set off within the vehicle cabin alerting the driver to make way for the emergency vehicle. Also, the location of the emergency site can be communicated to database 16, and any route displayed therefrom in the vehicle cabin can be adjusted to guide the driver of vehicle 12 away from the location of the emergency event, if in his/her line of intended travel. Thus, vehicle 12 is guided away from the emergency event, thus avoiding potential traffic congestion for vehicle 12, and potential traffic impediment for the emergency vehicle seeking to reach the emergency event (column 5 lines 63-67, column 6 lines 1-9).

Also, database 16 such as in system 10 can automatically alert the driver when approaching a train crossing, and so help prevent train-vehicle collisions (column 6 lines 10-13). By a display and/or alarm in vehicle 12 being alerted by system 10 (such as by sounding an audible alert or providing a visual alert such as a warning display in vehicle 12, such as at interior mirror assembly 19) (column 6 lines 25-32)

Thus, Uhlmann discloses compiling vehicle information from a variety of sources, including vehicle sensory data, at a remote location. Utilizing this compiled information, the remote server provides vehicle directional data (guiding information message) to include an information object, the information object comprising predetermined user specifications (user

display preference data) and additional data as required, the additional data including stored data, sensory related data, and data related to information objects.

Further, the smart map of Uhlmann, as disclosed above, anticipates determining a presentation format for the guiding information message according to a medium that is available to the user and appropriate to the user's circumstances according to a predetermined priority level, an presenting the information object on a medium, the medium selectable by the navigation system.

Uhlmann positively recites most embodiments of claim 19, but does not specifically disclose that the generated guiding information is a function of received weather and traffic data; rather, Uhlmann utilizes the current weather and sensory data to adjust vehicle parameters, such as suspension.

Mathews, however, teaches a navigation system and method, wherein the navigation management component 106 attempts to retrieve the specified route from the cache if it's determined that a cache function exists. If a caching component 108 exists, and has a route satisfying the route definition, then the cached route is returned to the navigation management component 106, which notifies 709 any of the other navigation components of the new route if needed. If a caching component does not exist 704 or the cache function does not have a route matching the route definition 706, a request for route calculation is sent to the navigation service component 109. The navigation service component 109 then processes, at block 707, the route request, resolving any remaining references to information, and then calculates the specified routes between the defined waypoints. Following the generation of the path, the navigation service component 109 may add additional related guidance information 708 as requested or in

accordance with the session configuration. This additional information may include current traffic conditions, weather, sports events, map data, personal preferences, services and facilities along the route, points of interest, etc. (para 0054).

Thus, Mathews teaches compiling current traffic and weather conditions, and generating guidance directions in response to a route request.

Both inventions are drawn to vehicle routing devices, wherein vehicle sensory information is compiled with traffic data and personal preferences to produce optimal routing. Uhlmann is deficient, with respect to the current invention, in that it is not disclosed wherein the current traffic and weather conditions are merged to produce guiding information. Mathews cures this deficiency.

Because both Mathews and Uhlmann both disclose/teach similar devices, it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute the one method for the other, to achieve no more than the predictable result of vehicle guidance information as a function of current traffic and weather conditions.

Simple substitution of one known element for another to obtain predictable results will support a conclusion of obviousness. See MPEP 2143 (B).

Regarding claim 20; in addition to the above cited information, Uhlmann does disclose dynamic vehicle data as well as static vehicle data (column 2 lines 14-67, column 3 lines 1-17, column 4 lines 55-67, column 5 lines 1-30).

Uhlmann also discloses a dynamic train crossing control system 50 of the present invention. Train 54 (that is equipped with a navigational system 56, preferably a GPS system,

that can identify the location, direction and/or speed of train 54) is traveling in direction 76 towards rail/road crossing 52 on rail track 62. Vehicle 58 (that is equipped with a navigational system 60, preferably a GPS system, that can identify the location, direction and/or speed of vehicle 58) is traveling in direction 78, also towards rail/road crossing 52. As train 54 approaches crossing 52, a train locator signal 66 (derived from navigational system 56 that functions as a position locator for the train) is wirelessly transmitted to a train control center 68. Train control center 68, in turn, transmits an alert signal 70 to telematic center 72 (that, for example, is an ONSTAR.TM. service provider or a Web site or a computer site, or an intelligent highway control center or a traffic control center), preferably by wireless transmission. As vehicle 58 approaches crossing 52, a vehicle locator signal 79 (derived from navigational system 60 that functions as a position locator for the vehicle) is wirelessly transmitted to telematic center 72. Telematic center 72, knowing of the imminent arrival of train 54 at crossing 52, transmits by wireless communication a train approach signal 74 to vehicle 58 in order to alert the driver of the vehicle that a train is approaching the rail/road crossing ahead. A signal device, such as an audible alarm or a visual display/icon, is activated in the vehicle to alert the driver to the situation. Also, telematic center 72, optionally, can transmit a signal 80 to train control center 68 alerting it to the imminent approach of vehicle 58 to crossing 52. A signal 76 is thereupon transmitted from train control center 68 to train 54 to alert the train driver of the approach of a vehicle to the crossing ahead (column 6 lines 38-67).

Thus, Uhlmann teaches a target information object for including position of the target and other data according to the specification available, and a navigation information object for providing data relating to a position of the user and a position of the target.

Matthews also teaches providing data relating to the environment including speed, fuel, and current weather and traffic conditions (para 0035, 0054).

All of the components and methods are known in the above prior art. The only difference is a combination of these elements into a single device.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the functions of Uhlmann and Mathews, since both systems could be used in combination to produce the predictable result of a vehicle navigation system which can provide target information in response to user specification, routing, traffic, weather, and vehicle static and dynamic properties.

Combining prior art elements according to known methods to yield predictable results is a rationale to support a conclusion of obviousness. See MPEP 2143(a).

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claim 21 is rejected under 35 U.S.C. 102(e) as being anticipated by Chern (US 2003/0060211).

Regarding claim 21, as best understood, Chern discloses a wireless location-based information-retrieval system which includes a wireless communication device. The wireless device has a transceiver for sending and receiving communications across a wireless communication network, a position-determination device for determining the location of the wireless device, and an Internet browser. A remote server communicates with the wireless device. The server receives the location data from the wireless device over the network and maintains a web page listing information service options. The information service options are accessible to and selectable by the wireless device via the browser. The server retrieves information from a database based on the location data provided by the wireless device and on the selected service option. The retrieved information is sent to the wireless device over the network (abstract).

Chern discloses a device, wherein a user in a vehicle can obtain driving directions to a destination address is provided to a handset. The user requests driving directions to the destination via keypad entry and/or voice command, and the request is communicated to server 136 over wireless network 140. At the time of the request, the handset location determined by position determination system 134 is also provided to server 136 to provide a starting point for the directions. Using the handset location and the destination address, server 136 calculates a route and compiles driving directions. The driving directions are transmitted to handset 130 over network 140 and are displayed or audibly rendered to the user. In addition to textual driving directions, a map showing the route may be displayed on the handset display. Options such as the shortest possible route, interstate route, safest route, most scenic route, etc. may be provided. The user's choice of options will dictate the route calculation. The options may be stored, and

prompts or scripts generated, locally (in the memory of handset 130). Alternatively, the options, prompts and scripts may be stored at server 136 and provided to the user via network 140 (para 0044).

Thus, Chern discloses a system for producing guiding information for a user in a vehicle, comprising means for generating a specification to retrieve specific data from information sources in a specific format for outputting to the user, As well as means for presentation of the compiled information through a plurality of media.

Further, the above provides for a first and second output medium for presentation.

Chern discloses that the processor 104 directs the overall operation of device 100. A computer program or set of instructions is typically coded or otherwise implemented on the processor to enable the processor to carry out the device operation. Memory 114 interfaces with processor 104 and may store program code and provide storage space for data useful in executing the program code and carrying out the device functions. Memory 114 may be implemented as ROM, RAM or any other convenient memory format. The features and functionality of the invention described below may be implemented using hardware, software, or a combination thereof, and such software can run on a processor such as processor 104 and be stored in a memory such as memory 114.

Transceiver 112 includes a transmitter that transmits voice and data information via antenna 120 to a recipient communication device such as, for example, base station 112. Transceiver 112 also includes a receiver that receives voice and data information from another communication device (e.g., base station 112). The received voice and data information is provided to the user or used to facilitate device operation.

Chern discloses that the user interface features include speaker 106, display 108, keypad 110, and microphone 116. Microphone 116 accepts voice or other audio information from the user and converts this information into electrical signals that can be transmitted by transceiver 112. Likewise, speaker 106 converts electrical signals received by transceiver 112 into audio information that can be heard by a user of device 100. Display 108 displays information such as call information, keypad entry information, signal presence and strength information, battery life information, or any other information useful to the user. Display 108 preferably takes the form of a liquid crystal display (LCD), which have low power consumption characteristics, but could also be implemented as a light emitting diode (LED) display or any other appropriate visual indicator. Keypad 110 typically includes an alphanumeric keypad and may also include special function keys. In one embodiment, keypad 110 is backlit to permit viewing of the keys in low light or dark conditions. Device 100 may also include a flip panel (not shown) that can be closed to conceal some or all of the keypad (para 0033-0035, respectively).

Thus, Chern again discloses a means for compiling, means for generating, means for retrieving information related to an information object, means for processing, and presentation means.

Chern discloses that a hands-free unit 132 is optionally provided to allow the user of wireless device 130 to communicate in a hands-free mode. Hands-free unit 132 may include a microphone and speaker to provide wireless device 130 with speakerphone-like capabilities. Such capabilities are particularly desirable where wireless device 130 is utilized in an automobile or other mobile situation. In one implementation, hands-free unit 132 is configured according to conventional industry standards for a "hands-free kit" (para 0039).

Thus, Chern discloses a first means for providing information regarding an information object, and providing a specification message comprising an information object on a first medium. Conversely, this implicitly provides selection means in that if the hands free medium is not used, the handset output devices will be used, As well as means for outputting information associated with said information object on a preferred medium, wherein selection is based on availability of the medium.

Chern discloses that in one example application, driving directions to a destination address are provided to a handset user. The user requests driving directions to the destination via keypad entry and/or voice command, and the request is communicated to server 136 over wireless network 140. At the time of the request, the handset location determined by position determination system 134 is also provided to server 136 to provide a starting point for the directions. Using the handset location and the destination address, server 136 calculates a route and compiles driving directions. The driving directions are transmitted to handset 130 over network 140 and are displayed or audibly rendered to the user. In addition to textual driving directions, a map showing the route may be displayed on the handset display. Options such as the shortest possible route, interstate route, safest route, most scenic route, etc. may be provided. The user's choice of options will dictate the route calculation. The options may be stored, and prompts or scripts generated, locally (in the memory of handset 130). Alternatively, the options, prompts and scripts may be stored at server 136 and provided to the user via network 140 (para 0044).

Thus, Chern discloses at least one example in which compiled information is retrieved after a route search on the handset via input devices (means for generating a specification),

means for presentation of the data on the handset, as well as the processor providing means for processing the data received from the database and presenting on the display the compiled information, containing a specification of a message comprising an information object.

Alternatively, Chern provides that the user may also specify avoidance of certain areas or parts of town, such as those that have high crime rates, gang or drug activity, or other undesirable attributes. Crime statistics from law enforcement authorities or other sources can be compiled and stored in database 138. Based on these statistics, certain areas or neighborhoods may be identified as high crime rate areas or otherwise undesirable areas. The user may opt to not receive choices for establishments in, or driving directions through, those areas. This feature can be implemented automatically, as a default selection or through a user prompt. Alternatively, the system may provide an automatic warning sound or indication to alert the user of entry into a high-crime-rate area. This feature is particularly useful if the user is unfamiliar with a particular area in which he or she is travelling (para 0048).

Again, Chern is discloses that the user can prompt the system to provide an automatic warning based on location information. This warning can be an audible or visual cue, based on user preference. Further, it is noted that this alarm will be output on the preferred medium based on the priority of information.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JONATHAN M. DAGER whose telephone number is (571)270-1332. The examiner can normally be reached on 0830-1800 (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JD
12 January 2009

/Jack W. Keith/
Supervisory Patent Examiner, Art Unit 3663